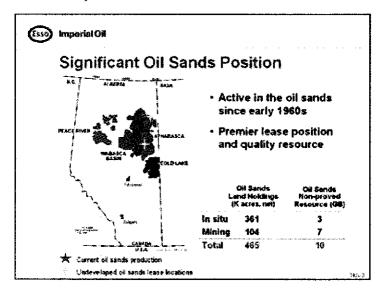


Cautionary Statement

This presentation contains forward-looking information on future production, project start-ups and future capital spending. Actual results could differ materially due to changes in project schedules, operating performance, demand for oil and gas, commercial negotiations or other technical and economic factors

Oil-equivalent barrels (OEB) may be misleading, particularly if used in isolation. An OEB conversion ratio of \$,000 cubic feet to one barrel is based on an energy-equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the well head.

Before we begin. I want to remind you that the presentation this morning contains forward-looking information and actual results could be different as a result of many factors - which are noted on this slide.



Imperial's oil-sands assets are enormous in size and scope, and offer longterm growth opportunities for the company.

We have been a pioneer in the development of Canada's vast oil-sands resources since the early 60's -- in both in-situ and mining projects.

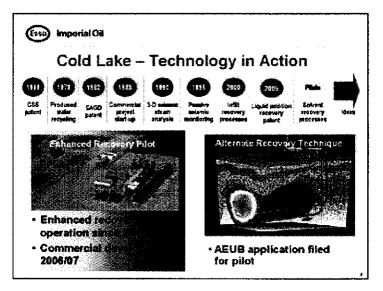
This map illustrates the three major oil-sands deposits and shows our position in both current oil-sands production (red symbols) and in undeveloped oil-sands leases (gold symbols).

Imperial holds about 465,000 acres of oil-sands leases including Cold Lake - the largest in-situ oil-sands operation in the world and the premier in-situ project in Canada. This asset is wholly owned and operated by Imperial.

Imperial also has extensive oil-sands interests which are currently undeveloped -- mostly in the Athabasca area of Alberta. The gold star northeast of Fort McMurray represents the Kearl leases on which we propose to develop a 300,000 barrel-a-day mining project with ExxonMobil Canada.

The gold star to the southeast of Fort McMurray represents a number of leases which we are evaluating for development using in-situ methods.

Let me start with a few words on our development at Cold Lake with some history on our research efforts in the oil sands.



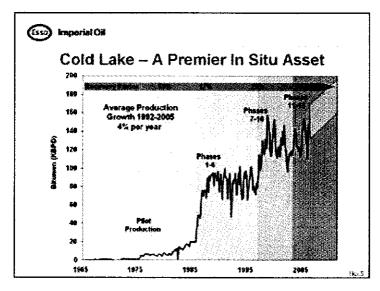
Imperial has been a leader in the development of much of the technology that has underpinned the commercial development of Canada's vast oil-sands resource.

The circles at the top of this chart highlight the numerous technology advances that we have made at Cold Lake since the 1960's. Imperial invested over \$250 million on research and technology development before the start-up of the Cold Lake commercial project in 1985. Many of you may not know that Imperial invented and held patents on both cyclic steam stimulation (CSS) and steam assisted gravity drainage (SAGD).

Our ongoing commitment to technology is unwavering. Our most recent success is a process we successfully patented in 2005. This invention enhances CSS performance through the addition of diluent with the steam. As a result, we will increase recovery in areas already developed, using existing wells, facilities and infrastructure. We have piloted this process since 2002 and an application will be filed with the AEUB for a larger-scale implementation of the technology later this quarter, with field start-up occurring in 2007.

In June we filed a pilot application with the AEUB for another recovery process. This new recovery process (shown in the schematic on the lower right) enhances the performance of SAGD through the addition of diluent with the steam. Drilling of two well pairs required for the pilot is to occur in early 2007, once the pilot application has been approved by the AEUB.

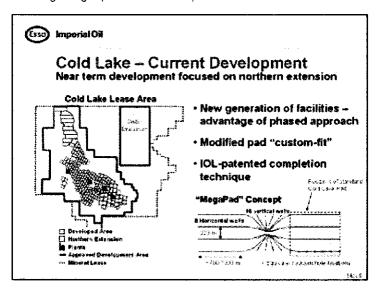
This sustained commitment to development of technology is a unique competitive advantage for Imperial Oil.



Imperial's wholly-owned Cold Lake project is a world-class asset and the premier in-situ asset in the oil sands. It produces as much as all other thermal in-situ oil-sands projects combined.

As you can see from the graph on this slide, bitumen production at Cold Lake has increased significantly since our first pilots in the 1960s, to the current production level of over 150,000 barrels-per-day. We have taken a deliberate, phased approach to developing this high-quality asset — bringing production on in stages to incorporate advances in technology into new production phases.

Across the top of the graph in red, I have listed the changes in bitumen recovery factor over the last 20 years. The increase from 13% to 30+% is a direct result of our continued focus in research and technology development and our growing expertise in thermal operations.



Looking forward ...

Near term development at Cold Lake is focused on developing the "northern extension" of our approved development area.

The Cold Lake lease area (shown as the dashed black line on the map) is about 300 square miles. The approved development area shown as the solid black line is about 140 square miles and we are currently active in about half of that.

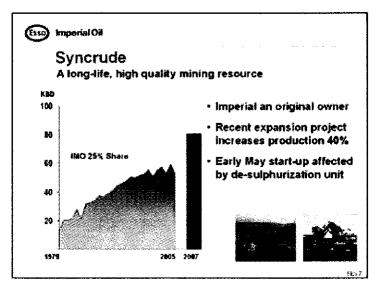
Our efforts to the end of the decade are to develop the area shown in red, one of the new areas which we received regulatory approval for in 2004. Over the next five years, we plan to develop 10 new pads in this area. The first investments were made in 2005 with the drilling of two new pads in the southerly part of this area — we are just completing construction of the surface facilities and will begin steaming these pads in the next few months.

This development is another example of our commitment to continuous improvement through application of new technology at Cold Lake;

- The well design and layout in this development has been customized to optimize resource access.
- Looking at the illustration in the bottom right of this slide, you can see that these new 'mega' pads use horizontal as well as vertical wells. One pad can now access the same resource as three standard Cold Lake pads, which reduces the overall capital required for this development, as well as the surface footprint.
- For successful thermal operations, it is essential to control the steam distribution in a horizontal well to achieve optimal production results. Imperial has developed a patented completion technique with a special designed wellbore assembly to achieve this objective.

Finally, I'll draw your attention to the black rectangle directly to the east of our northern extension area. This is the next section of the Cold Lake lease

that we will develop. We have a team in place evaluating the most economic options to bring this part of the Cold Lake lease into production.



Turning to mining....

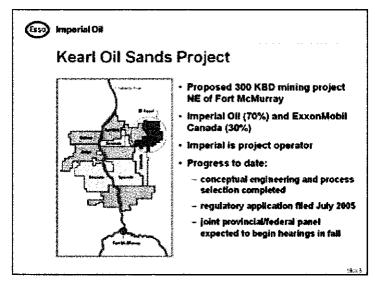
Imperial is a founding member of the Syncrude consortium established in 1964 and remains the operation's second-largest owner, holding a 25 percent interest.

Syncrude is the largest oil-sands operation in the world, with a resource base to support decades of production. Annual production from Syncrude has steadily increased since its start-up 25 years ago.

The recently completed Stage 3 expansion included the addition of a third, 100,000 barrel-a-day coker. As a result, site production will ultimately increase by about 40 percent. As well, the quality of the entire synthetic crude output will be improved to capture higher realizations.

The expansion project was completed and started up on May 6, but unfortunately had to be brought down on May 18 to deal with a persistent odour problem associated the start-up of the new Flue Gas Desulphurization unit.

Syncrude has been working with experts from ExxonMobil to resolve this unexpected problem, and the current expectation is that the underlying problem will be rectified and the new coker brought back on line later this month.



Let me turn now to Kearl, a proposed bitumen mining project in Fort

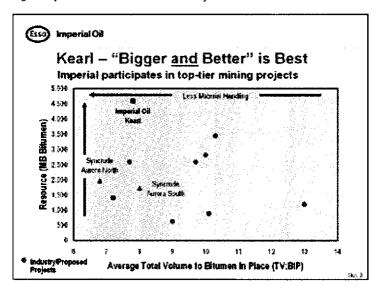
McMurray.

Imperial owns a roughly 70 percent interest and is operator of the project. The remaining 30 percent is held by ExxonMobil Canada.

The Kearl leases hold sufficient bitumen to support a 300,000 barrel-a-day mine for more than 40 years. We plan to develop the Kearl project in phases with the initial phase sized at 100,000 barrels-per-day, and two subsequent phases to follow.

To date, we have completed conceptual engineering and process selection for the project.

The regulatory application was filed in July 2005. We were notified last month that a joint provincial/federal panel will conduct the hearings for the Kearl project, and we expect public hearings to begin this fall with a regulatory decision about the end of this year.



Kearl is arguably the best undeveloped resource in the Athabasca region — and with apologies to our conference host, while "bigger is better" in some circles, for Kearl, a bigger resource combined with a better quality is best for development.

This chart plots projects based on the relative size and quality of the bitumen resource.

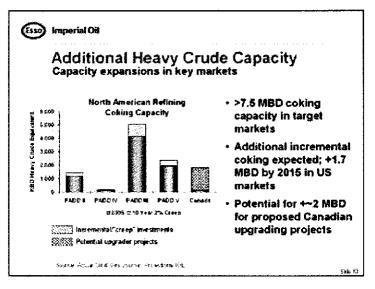
The "x" axis plots "TV to BIP" (total volume to bitumen in place) — a key quality metric for mineable oil sands. This measures the total volume that has to be mined — overburden plus ore — relative to the amount of bitumenin-place. Low numbers are better. Less material is handled for each barrel of bitumen produced, so there is a natural operating expense advantage for a mine

The "y" axis plots recoverable resource. The "sweet spot" on this graph is the upper left hand corner indicating high quality and large recoverable resource.

The red circles represent industry projects – both producing and proposed. The blue symbols represent the projects that Imperial is participating in – you can see that Syncrude and Kearl are both high quality projects and Kearl is the best of the bunch.

For the entire Kearl mine — all three phases — TV to BIP is 7.8. The combination of the high quality of the Kearl resource on the site and large resource size — 4.6 billion barrels — is a significant economic advantage for development of this project.

I'd like to add that although the current mine plan filed in our regulatory application for Kearl is 4.6 billion barrels of recoverable bitumen, total bitumen-in-place on the Kearl leases is over 13 billion barrels.



A final point on Kearl related to how we will market the bitumen.....

For the first phase of Kearl, we plan to market the bitumen as a blended heavy or sour crude, selling into the increasingly expanding North American markets for Canadian heavies. Marketing plans for volumes from additional phases are being developed.

Our assessment is that the most economic approach for the first 100,000 barrels-per-day phase of Kearl bitumen is to market to existing upgrading facilities.

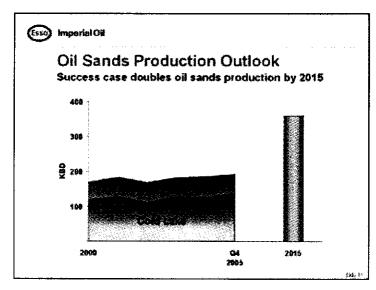
Imperial refineries already process a significant amount of heavy crude oil and we will advance low-cost expansions to take more. But, more broadly, we expect that there will be additional heavy crude capacity in the markets we currently sell into.

For capital-intensive industries, the most attractive investment is incremental expansion, or "creep" -- and this is especially true for the refining business.

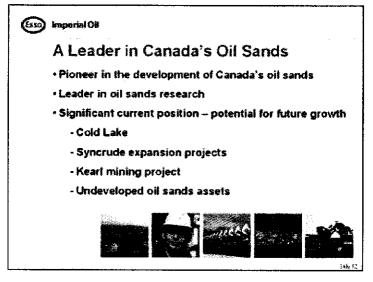
The blue bars on this chart illustrate current coking capacity, expressed in thousands of barrels of Heavy Crude Equivalent - over 7.5 million barrels per day in the North American market.

Modest creep shown in the blue hatched bar of only two percent a year will yield an additional 1.7 million barrels per day of capacity by 2015. In addition, there are proposed upgrading projects in Canada, shown in the red checkered bar — either stand-alone or with dedicated bitumen supply — that could deliver an additional two million barrels per day of capacity by 2015.

We'll continue to evaluate upgrading facilities at our Edmonton refinery. But a decision to do so will not be made until we're convinced that this capital investment will be profitable, competitive and yield attractive returns for our shareholders.



This chart illustrates the potential impact of Imperial's oil sands resource portfolio on future production. The successful development of the Kearl resource along with continued selective investments at Syncrude and Cold Lake, could lead to doubling of Imperial's production from the oil sands by 2015.



Let me close with a summary of the key points that I feel distinguish Imperial Oil as a leader in the development of oil sands.

We have been a pioneer in the development of oil sands — with extensive operating experience and knowledge. Our continued commitment to research and technology development will provide us with the key to continued economic and responsible development of oil-sands resources.

We hold a significant position in the oil sands resource -- with high-quality assets like Cold Lake -- and are well positioned for continued future growth in both in-situ operations as well as mining.

Thank you for your attention.

For more information:

For more detailed investor information, or to receive annual and interim reports, please contact:

Susan Swan Manager, Investor Relations Imperial Oil Limited 237 Fourth Avenue S.W. · Imperial Oil -- A Leader in Oil Sands Remarks by E.L. (Eddie) Lui, vice-president, oil sa... Page 9 of 9

Calgary, Alberta T2P 3M9 Email: susan.b.swan@esso.ca Phone: (403) 237-4537

Copyright 2006. Imperial Oil Limited. All rights reserved.

Français | Home | Contacts | Disclaimer | Privacy statement | Sitemap



Expert travel advice and solutions



Business Travel Center **AliBusiness**



Search)

Sign In | 👺 | Free Newsletters

Home | Business Advice

Professional Journals

| Business Bloggers | Forms & Agreements | Industry Centers

| Business Directory

Exxon Mobil Corporation and China Petroleum and Chemical Corporation Expand Strategic Alliance.

Publication: Business Wire Date: Monday, September 11 2000 Subject: Petroleum industry, Petroleum Company: China National Petroleum Corp., Exxon China Petroleum and Petrochemical Company Ltd, Exxon Mobil Corp. Product: PETROLEUM AND COAL PRODUCTS, Petroleum, Petroleum and Coal Products Manufacturing

You are viewing page 1

Business Editors

IRVING, Texas--(BUSINESS WIRE)--Sept. 11, 2000

ExxonMobil (Guangdong) Petroleum & Petrochemical Company, Limited, a subsidiary of Exxon Mobil Corporation (NYSE:XOM), and China Petroleum and Chemical Corporation (Sinopec) announced today that they have entered into an agreement that will significantly increase ExxonMobil's presence in China and strengthen

Ads by Google

the cooperation between the

two companies.

Oil2 is Historically Successful inHigh Profit. View Our Track Record!

www.Oil2.com Party/Equipment Rentals Complete cost-effective softwarefor small to

www.xgensoft.com

medium rental stores

Petroleum investment

Petroleum Engineering Search Engineering Jobs at Dice.comQuality Positions Available Now www.Dice.com/Engineering

Under this agreement, the two companies will jointly study the development of the following major manufacturing and exclusive fuels marketing joint ventures in Guangdong Province. The refinery at the Guangzhou Petrochemical Complex in Guangdong Province will be evaluated for expansion of up to twice its present 150,000 barrel-per-day capacity. Similarly, existing petrochemical facilities will be evaluated and development of a world-class petrochemical complex will be studied. The two companies will also evaluate a fuels marketing joint venture in Guangdong Province that could result in the development of up to 500 service stations within three years following the venture formation.

In addition, government approval is expected imminently for the Fujian

1 2 3 Next Page >

т Т Т

्रङ्ग, Print 🖾 Email 🕮 Digg It 🗗 del.icio.us

RELATED TOPICS

Industries:

Petrochemica's

Petrochemical Manufacturing

Petroleum Refineries

Transportation Support

Services

Wholesale Trade

Diesel Fuel

Oil Extraction

Jet Fuel

Geographies:

South China

Texas, USA

Saudi Arabia

Subjects:

Joint Ventures

Regional & Local Governments

Real Estate Development

Approvals

TOOLS

Find Jobs

Find Franchises

Find Companies

Find Solutions

Ads by Google

Dil Gas Investment

For Accredited Investors nterestedin Energy & Profit Look vw.Oil2.com

Party/Equipment Rentals

small to medium rental stores

Cop 12 Stocks for 2008 ExpertsShare Their Top Picks. Free

w.NewsletterAdvisors.com

BROWSE ALL TOPICS

Business Credit Business Travel

Careers F-Commerce & Internet Finance & Accounting

Labor & Employment Management Marketing & Advertising

Operations Personal Finance Sales & Selling

Business Guides Buyer's Guides

Forms & Agreements Business Directory Business Advisors Business Glossary

BROWSE TOOLS

Business Periodicals Partner Resource Center Business Answers Business Videos Podcast Library Learning Center

Sponsored Links

Get fast, free competitive quotes on business purchases from qualified Remove hassle: restore peace of mind-HP Data Protection Product Click Now - View Videos On Running Your Business

Company Profile for Aperto Networks.

Kyocera Wireless Corp. Joins Celebs Snoop Dogg, Stevie Wonder, Gary

Payton, LeBron James and More to

NEWLY ADDED ARTICLES

USC and CTC Collaborate on Lightweight Composite Core for Power Lines; Project Could Double Electric

S&P Lowers Rating on One Conseco-Related Trust to 'D'.

Bruce Blair Joins Creditek as Senior Vice President and Chief Information

Fitch Rates GreatAmerica Leasing Receivables 2003-1, LLC.

Xin Net Corp.: Acquisition of Dawa Business Group

BUSINESS DIRECTORY LISTINGS

See More

Diesel Fuel Filters

Industrial product directory allows users to send RFQs, view catalogs and compare suppliers. Find suppliers of Diesel Fuel Filters. www.ThomasGlobal.com

Dodge Diesel Fuel Economy

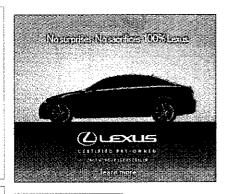
Dodge Diesel Fuel Economy, Info, Photos, Morel Get Local Dealer Invoice

Edmunds.com

Fuel Bladders and Pillow Tanks at Interstate Products

100 gallon to 50,000 gallon collapsible fuel bladders tanks. Civilian and Mil Spec tanks available. Call toll free for information. www.interstateproducts.com

Search the Business Directory:





Personal Finance



Site Map | Contact Us | About Us | Media Kit | Reprints | RSS Directory | Sign up for Free Ne

Copyright © 1999 - 2008 AllBusiness.com, Inc. All rights reserved. No part of this content or the data or information included therein may be reproduced, republished or redistributed without the prior written consent of AllBusiness.com. Use of this site is governed by our Copyright and Intellectual Property Policy, Terms of Use Agreement and Privacy Policy.

> @ Copyright 2008 The Gale Group, inc. All rights reserved. @ COPYRIGHT 2000 Business Wire

You may not repost, republish, reproduce, package and/or redistribute the content of this page, in whole or in part, without the written permission of the copyright holder.

Get In-Depth Company Information from Hoover's | Buy a D&B Credit Report | What is in Your Company's D&B Credit Report?

Online Business Database | Online Business Information | Email Marketing Lists | Sales and Marketing Solutions | Business Mailing Lists



ExonMobil

HOME

Worldwide

Products & Services

Our Company

Corporate Citizenship

Our Brands

Your Industry

Search for:



Our Company

Our Activities





→ ABOUT EXXONMOBIL

Our Activities
Technology
Upstream
Downstream
Chemicals
Financial Highlights

- > ACTIONS & RESULTS
- > NEWS ROOM
- > JOBS & CAREERS
- > INVESTOR INFORMATION

The purchase of a small refinery with only a 7,000 - barrel - per-day capacity in 1967 led to the establishment of Esso Sriracha Refinery. Two years later, in response to the high demand for petroleum products generated by Thailand's fast - growing economy, Esso decided to build new refining unit to raise its capacity to 35,000 bpd. The capacity expansion was completed in 1971. Due to increasing demand, the refinery crept its capacity to 46,000 bpd. By 1976.

In 1985, its capacity was raised to 63,000 bpd. Later, the government approved Esso's two-phase plan in 1991 to boost the nameplate capacity to 145,000 bpd.

At present, the refinery can refine 170,000 barrels of crude oil per day to serve the Thai oil market

In 1998, Esso began construction of the Thailand Aromatics Recover Project (TARP) worth 16,000 million baht at the Sriracha refinery site. Construction of the aromatics plant completed in 1999. Following completion, the plant's operation has been integrated into the refinery. This state-of-the-art aromatics plant will annually produce 350,000 tons of paraxylene.

The Thailand Aromatics Recovery Project succeeded in many aspects - starting from cost management, quality of the work and safety performance. The project is a successful story of the cooperation between ExxonMobil's petroleum and chemicals businesses.



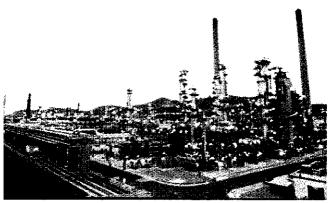
More About the Sriracha Refinery:

Community Support
Community Relationship
Safety
Process
Environmental
Contact Us

The Main Units

Esso Sriracha Refinery's main units are:

Atmospheric Pipestills (APS) distill crude oil into various kinds of products. There are two atmospheric pipestills - the fist one has capacity of 80,000 bpd and the other 90,000 bpd.



The Main Units

Continuous Catalytic Regenaration and Reformers (CCR) convert low-octane fuels into high-octane fuels for production of various grades of unleaded gasoline. The unit consists of a 9,000 bpd. Powerformer and a 20,000 bpd continuous catalytic reformer.

Vacuum Pipestills (VPS) produce asphalt from heavier oils from the atmospheric pipestills. The Sriracha refinery has two vacuum pipestills - the first pipestill has a capacity of 8,000 bpd., and the second one has a capacity of 41,000 bpd. The lighter oils are send to the fluidized catalytic cracking units.

A Fluidized Catalytic Cracking Unit (FCCU) converts fuel oil into lighter diesel and gasoline to serve the increasing demand of transportation oils. The unit has a capacity of 33,000 bpd.

Sulfur Recovery Units (SRU) produce liquid sulfur from hydrogen sulfide gas which is generated from Hydro- desulfurization units especially from low-sulfur diesel production. The are two 82-ton sulfur recovery units.

Tail Gas Clean Up Unit (TGCU) reduces sulfur dioxide in flue gases to ensure that emission of sulfur dioxide adheres to Government of Thailand emission requirements.

Desalination Plants supply the refining units with fresh water produced from seawater. The refinery's three desalination plants produce more than 3,000 tons of fresh water per day. Having foreseen that Chonburi province may face a fresh water supply problem, Esso Sriracha Refinery is the first refinery in Thailand that produces its own fresh water from seawater. The first desalination plant was installed in 1967.

Power Generators consist of four boilers and two gas turbine generators. The refinery's five boilers produce a total of 120 tons of steam per hour. They have been designed and equipped with high standard protection tools.

The two gas turbine generators produce electricity for the Esso Sriracha refinery with a total capacity of 50 megawatts. The gas turbine generators use natural gas and desulfurized gas from the refining process, which is an effective way to save energy and reduce the emission of sulfur dioxide into the air.

© 2002 Exxon Mobil Corporation. All Rights Reserved.

ExxonMobil Home | Help | Sitemap | Contact | Privacy & Disclaimer

ExonMobil

Products & Services

Our Company

About Us

- ➤ NEWS ROOM
- > JOBS & CAREERS
- > CORPORATE CITIZENSHIP
- ➤ ABOUT US History Company Information Viewpoints

HOME

Singapore

Your Industry

Worldwide









Singapore Refinery

Our Company

Our Singapore Refinery has two operating sites - one on the mainland (referred to as Jurong) and another on Jurong Island (referred to as Pulau Ayer Chawan or PAC). The integrated refinery processes some 605,000 barrels of crude into fuels and feedstock for our own chemical plants and

Our Brands

The Singapore refinery also manufactures industrial and automotive lubricants, including the baseoils that go into Mobil 1, the leading synthetic motor oil that provides cars with an outstanding level of engine protection and increased fuel economy. Mobil 1, which performance is tested and well-proven in Formula One races, is also the lubricant of choice for leading car manufacturers such as Porsche, Mercedes Benz, Bentley and Aston Martin.

· Total manpower: 740 employees

Total throughput:

Jurong - 309,000 barrels per day of crude oil

Jurong Island (PAC) - 296,000 barrels per day of crude oil

Key features:

Can handle a wide range of crudes and operate at different rates of "feed" in order to meet different requirements.

Key markets:

Supplies petroleum products to the Asia Pacific region, with products also sold locally, and delivered to "third parties" le independent oil traders and national oil companies who acquire crude oil, ship it to Singapore for refining and market the product

Products

15 grades of gasoline 10 grades of jet / diesel 10 grades of chemicals 5 grades of fuel oil

Total size / land area: Jurong - 2,000,000 sq m Jurong Island (PAC) - 3,187,972 sq m (including foreshore and all

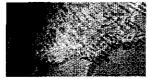
Date completed

1965 - Jurong 1971 - Jurong Island (PAC)

To read our brochure, Click here:

Company Information:

Singapore Refinery Singapore Chemical Plant Fuels Marketing



Countries in Asia Pacific

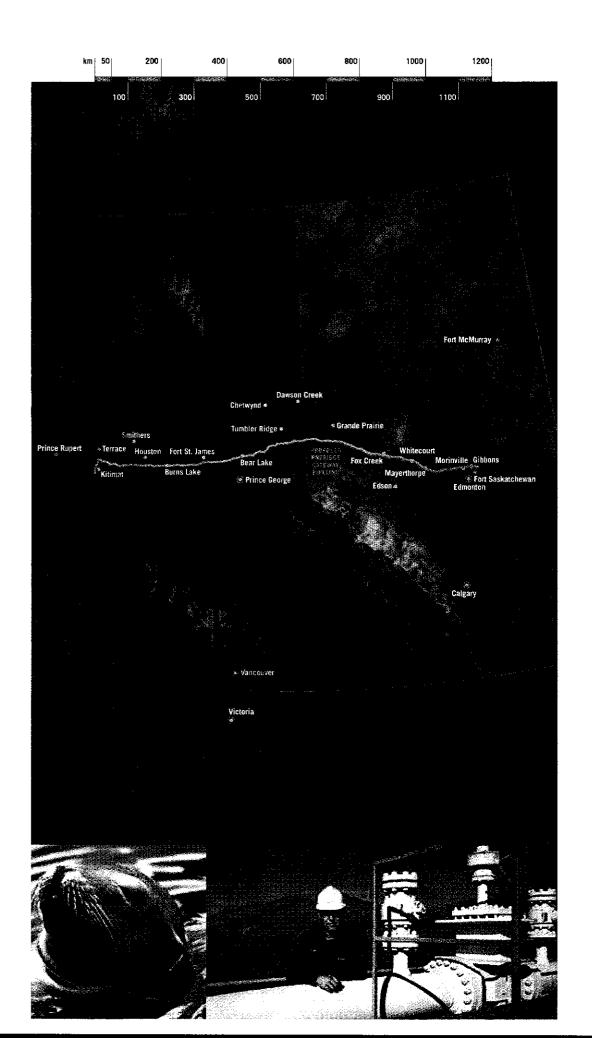
Bangladesh India Pakistan Philippines South Korea Taiwan Vietnam

© 2003-2008 Exxon Mobil Corporation, All Rights Reserved

ExxonMobil Home | Help | Sitemap | Contacts | Legal Notice

ENBRIDGE GATEWAY PREJECT





PROJECT OVERVIEW

The proposed Enbridge Gateway Project is an important part of Canada's energy future and will help ensure there's enough capacity to transport the one million barrels of new oil per day expected from Western Canada by 2010.

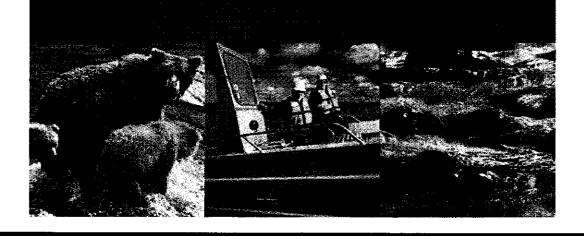
In 2005, Enbridge initiated environmental, engineering, public meetings, aboriginal engagement and field work to support a possible regulatory application for a petroleum export pipeline, a condensate import pipeline and a marine terminal as part of the Enbridge Gateway Project.

The export pipeline would transport petroleum from Strathcona County, northeast of Edmonton, to a new marine terminal in Kitimat on the north central coast of British Columbia, where it would be exported to market.

Additionally, the import pipeline would transport condensate, a liquid by-product of natural gas, from the new Kitimat marine terminal to Strathcona County. Both pipelines would be built in the same right-of-way. The decision whether to proceed with one or both pipelines is subject to commercial considerations.

A Preliminary Information Package has been filed with regulatory agencies and the federal government. It is intended to inform potentially interested parties, and to permit federal regulators to define the regulatory review process to satisfy the requirements of the National Energy Board and the Canadian Environmental Assessment Agency.

While field work is an important step in the development of the project, it will require commercial certainty to move forward. Enbridge is working with interested shippers to finalize agreements and initial pipeline capacity requirements.



PROPOSED PROJECT SCOPE

Petroleum Export Pipeline

- The petroleum export pipeline will run approximately 1150 kilometres from Strathcona County, Alberta (west of Bruderheim) to a new marine terminal to be sited at Kitimat, British Columbia.
- The pipeline is being designed for throughput levels above 400,000 barrels of oil per day on average and will measure 762 mm or 914 mm (30 or 36 inches) in diameter.

Condensate Import Pipeline

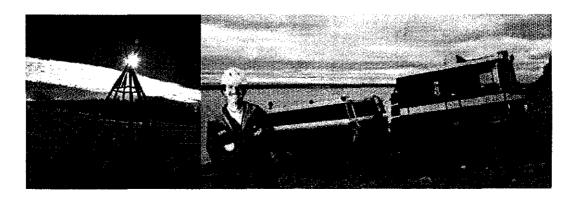
- The condensate import pipeline would run approximately 1150 kilometres from a new marine terminal, sited at Kitimat, British Columbia to Strathcona County, Alberta (west of Bruderheim).
- The pipeline is being designed for throughput levels above 150,000 barrels of condensate per day on average and would measure 508 mm (20 inches).
- Condensate is a petroleum product used in oil refining and to dilute heavy oil for easier transport by pipeline.

Marine Terminal

- Enbridge is proposing to build a marine tank terminal at Kitimat, British Columbia to service both pipelines.
- Certified ocean marine tankers will be used to either import condensate product or export petroleum product from the proposed marine terminal.

Anticipated Timeline

- In 2006, Enbridge will continue detailed field studies, aboriginal engagement and public consultation to support a regulatory application for this project.
- Enbridge will continue to work towards definitive long-term agreements to ensure commercial feasibility for the project.
- Pending commercial agreements, Enbridge is targeting to file its regulatory application with the National Energy Board in 2006.
- Subject to regulatory approval, construction of the project is scheduled to begin in 2008 with a completion date of 2010.





We believe it is important to contribute to the future by fostering the development of renewable and alternative energy sources. Our strategy is to invest in energy technologies that compliations our core operations, provide an unasimated therefore and open the door to forgetern distincts apportunities.

when Power plant an important part of exponents and differential forms of energy. Together with Sunctor Energy file; and Ethil Wind Power Cartada, we had a CENTATA million wind power parties; the Magnath in couthaire Alberta. The 20-turbune, 35-megawatt facility generates enough energy to meet the equivalent demands of about 13,000 homes. We use on share of the output to power pump stations along our Liquids Pipelines System.

Mi also merate

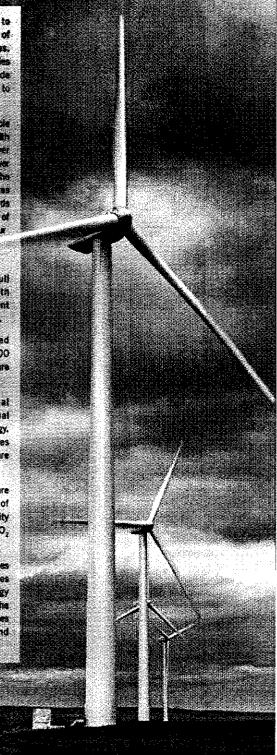
the Sunfiridge Wind Power Project at Gull Lake: Saskatchewan, in partnership with Suncer, in 2003, the 11-megawatt plant exceeded its predicted wind power output.

Additionally, Enbeldge Inc. announced in 2005 that it will be developing 200 megawatts of wind power on the eastern shore of Lake Human in Bruce County, Ontario.

Entridge aims to minimize the visual impact of our wind farms through optimal site design and the smart use of technology. For instance, by installing larger turbines that produce more power, fewer towers are needed on the ground.

Together, Enbridge's wind power projects are expected to provide nearly 15 per cent of Canada's installed wind electricity capacity and offset about 115,000 tonnes of CO₂ emissions each year.

fuel Cells are another Enbridge focus. Besides wind power, we are exploring opportunities to invest in emerging afternative energy technologies that use natural gas. One of the most important is the fuel cell, which promises high performance, near-zero emissions and increased energy efficiencies.



Creating Economic and Social Opportunities

The construction and operation of the Enbridge Gateway Project will deliver economic and social benefits to local communities in Alberta and British Columbia. Should the project receive regulatory approval, it is expected to create thousands of construction jobs during the peak construction period, anticipated to occur between 2008 and 2010. We expect over 85 long-term employee jobs focused on pipeline and related facilities operations once construction is complete.

We are committed to working with stakeholders to ensure local individuals, communities and businesses have an opportunity to benefit from this project.

Building Relationships, Building Confidence

At Enbridge we take pride in our long-standing reputation as a good neighbour and socially responsible corporation.

We are committed to meaningful discussion with stakeholder communities as well as First Nations and Métis in Alberta and British Columbia. We are also committed to constructing and operating the Enbridge Gateway Project to the highest practical environmental and safety standards.

We're Listening to our Communities and Stakeholders

Over the past three years we've been meeting with communities, First Nations, Métis, interest groups and governments. This dialogue has been considered in the preliminary project design with the goal of mitigating environmental impacts, including those on wildlife and traditional land uses.

We have conducted preliminary environmental analysis of the project and have incorporated this analysis in the preliminary project design and general project route. As we begin the detailed environmental studies and stakeholder consultation required for regulatory application, we will work to identify and mitigate potential impacts of the project.



"Enbridge is committed to building relationships with communities where we operate"

-- Ar Meyer

Presiden

Enbridge Gateway Pipelines Inc

There are no dividing lines between good business practices and Corporate Social Responsibility. Our corporate performance is built upon a solid foundation of good business practices—from treating stakeholders fairly and reducing our impact on the environment to performing to the highest standards of business ethics. For a copy of our Corporate Social Responsibility Report, visit www.enbridge.com

We Welcome Your Input

We believe in open and transparent consultation about our project plans with all of our affected communities and stakeholders. Interested parties will be engaged on an ongoing basis through various means, including open houses, public information meetings and information materials.

Enbridge will continue to discuss the Gateway Project with interested parties into 2006 in aboriginal and non-aboriginal communities across Northern British Columbia and Alberta.

Enbridge and its contractors will also continue environmental, engineering and land studies, as well as public consultation and aboriginal engagement, which are important components of any planning stage. This work will help us determine the best possible route for the pipeline and allow us to assess and minimize potential impacts from construction and during operation. Enbridge has a history of working with the communities in which it operates and looks forward to cultivating and supporting similar relationships with local communities along the proposed Gateway corridor.

If you would like more information about the Eubridge Gateway Project or information on our consultation program, please contact:

Website: www.enbridge.com/gateway Toll Free Telephone No. 1-888-434-0533





Embridge Inc. owns and operates Eneradge Pipelines Inc. and a variety of alfiliated pipelines in Canada, as well as Canada's largest natural gas distribution company. Enbirdle Gas Distribution, which serves customers in Ontario, Quebec, isswer Brunswick and New York State. Our company employs over 4.500 people in Canada and the United States.

Recently, Enbridge was named as one of only tive Common companies ranked in the Global 100 most sustainable corporations in the world at the World Economic Forum of Dayos, Switzerland,

Embridge Pipelines Inc. is a global leader in the problem, industry and operates the world's longest crude of and liquids pipeline system.

Enbridge Gateway Pipelines Inc. is a corporate ontity establication under Enbridge Inc. formed to manage the development of the Enbridge Gateway Project, www.enbridge.ccm/gateway

Canadian oil sands vital to China's energy security: NDRC

Print this page

May 18, 2006 **Platts**

Publication

China's investment in Canada's oil sands projects form a vital piece of the country's energy security strategy for years to come and will help meet the country's increasing energy needs, Zhang Yuqing, deputy director-general of the energy bureau within China's powerful National Development and Reform Commission, said Thursday.

State-owned offshore oil producer CNOOC Ltd has taken a 16.69% stake in privately-owned Canada-based MEG Energy, and the C\$150 million (\$135) million) acquisition is expected to help pave the way for further investment by the Chinese oil major in Canada's huge oil sands resources. Calgarybased MEG Energy owns oil sand leases covering 32,900 acres in Alberta.

Alberta's huge oil sands deposits make up the vast bulk of Canada's total proven crude reserves. It has established oil sands reserves of 178 billion barrels, including 4 billion barrels of cumulative production, the vice president of Canadian energy research institute, said Marwan Masri, speaking at the same China-Canada energy cooperation conference, as Zhang. The remaining reserves are 174 billion barrels, "By 2020, oil sands production is estimated to reach 3 million barrels per day," he said.

EXPENSIVE UP-FRONT INVESTMENT

However, oil sands production techniques are expensive for now, and need a high market price environment to make any investment worthwhile, industry sources said on the sidelines of the Beijing conference.

Production methods include sophisticated mining and extraction approaches like steam stimulation, and steam-assisted gravity drainage. Developing nuclear energy to generate enough power to pump steam into the grounds to extract the oil sands has been considered as part of long-term projects.

Oil sands are gritty deposits of tar-like bitumen, and Canada's deposits are now recognized as the biggest source of crude oil outside Saudi Arabia.

Extracting and processing sticky bitumen is much more expensive than producing and refining conventional crude, but global supply concerns have

pushed western crude benchmarks to about \$70 a barrel and made bitumen projects more economically viable, industry players said at the conference.

China's other two state-owned oil giants, Sinopec and China National Petroleum Corp, have also taken interests in oil sands projects in Canada.

CNPC's oil sands investment is under its offshore China National Oil and Gas Exploration and Development Corp. "We are positive about CNPC's [oil sands] investment in Canada and see potential in the new resource," an official from the CNPC-Alberta Petroleum Center said. CNPC has a cooperation agreement in place with Canada's oil-rich Saskatchewan province, and subsidiary PetroChina is developing a pipeline project.

Sinopec has acquired 40% of the Northern Lights Oil Sands Project in Alberta, Canada at cost of C\$150 million. Production was expected to begin in 2009-2010 from these investments, industry players said. Meanwhile, work has started to get ready to transport crude from the oil sands field to China.

ENBRIDGE, PETROCHINA TRANSPORTATION PACT

Last year April, pipeline company Enbridge entered into a memorandum of understanding with PetroChina International Co, a division of CNPC, to cooperate on the development of the Gateway pipeline and supply of crude oil from Canada to China.

The Gateway pipeline is expected to move 400,000 b/d of Alberta oil sands production from Edmonton to a port on the west coast of British Columbia, where it would be shipped by tanker to China, other Asia-Pacific markets, and California. Enbridge will help PetroChina to aggregate long-term supplies of Canadian crude oil.

Enbridge and PetroChina have a number of crude supply initiatives under development with a target of around 200,000 b/d. Enbridge has separate initiatives to accumulate commitments from other potential shippers on Gateway to fill the remaining capacity.

The Gateway pipeline that Enbridge is proposing would be a new 30-inch diameter crude pipeline with a design capacity of 400,000 b/d. It would provide a new export route to markets in the Asia-Pacific region and the US west coast. Enbridge is assessing two potential ports--Kitimat and Prince Rupert--for the deepwater marine terminal that will be needed for ships to China.

The \$2.5 billion, 1,160-kilometre pipeline is scheduled to come on line in 2011, Enbridge vice president Guy Jarvis said at the conference.



Copyright © 2002-2008 University of Alberta **UofA Web Project** Privacy Policy